

## Claims

- [c1] 1. Gas storage capsule, containing the gastight case inside which particles of a sorbent for sorption of the gas are placed, supplied with the release tightened channel, characterized by further providing inside the case a free cavity from a sorbent which volume is sufficient for accommodation of the given quantity of sorpting gas in a firm phase, and it is executed with an opportunity of introduction inside of the case sorpting gas in a firm phase.
- [c2] 2.Capsule according to claim 1, wherein tightening of the release channel is executed as the valve supplied with an elastic element, opening release of gas from a capsule only at excess of pressure inside a capsule of pressure of environment environmental a capsule on the given value.
- [c3] 3.Capsule according to claim 1 or 2, wherein the case is executed as the cylinder connected from two or more parts.
- [c4] 4.Capsule according to claim 3, wherein the valve is placed on a joint of parts of the case.
- [c5] 5.Capsule according to any claim from 2 to 4, wherein as an elastic element of the valve the part of the case executed as a petal serves.
- [c6] 6.Capsule according to claim 1, wherein the release tightened channel is executed as the molecular sieve passing only molecules of sorpting gas.
- [c7] 7.Capsule according to any claim from 1 to 7, wherein the release tightened channel is supplied with an rupture membrane.
- [c8] 8.Method for filling of a capsule with a sorbent gas by a premise of a sorbent in a capsule containing the gastight case, having ability of a keeping of particles of a sorbent and an opportunity to let out gas from a capsule, sorption by a sorbent of the gas, characterized by further providing inside the gastight case form a free cavity in which enter the given quantity of sorpting gas in a firm phase.
- [c9] 9.Method according to claim 8, wherein enter gas in a capsule before filling a

capsule by a sorbent.

[c10] 10.Method according to claim 8 or 9, wherein form a capsule as the cylinder  
executed from two or more parts.